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IN THE SPECIFICATION

a1 The present application is a continuation of copending U.S. Patent Application Serial No. 09/535,251, filed March 27, 2000, ^{now abandoned} which is a continuation-in-part of U.S. Patent Application Serial No. 09/075,618, filed May 11, 1998, ^{now abandoned} which claimed priority from Taiwan Application No. 87105966, filed April 18, 1998, all the disclosures of which are herein specifically incorporated by this reference.

IN THE CLAIMS

4. (New) A method of chemical-mechanical polishing for forming a shallow trench isolation, wherein a substrate having a plurality of active regions, including a large active region and a small active region, is provided, comprising:

forming a silicon nitride layer on the substrate;
forming a shallow trench between the active regions;
forming an oxide layer over the substrate, so that the shallow trench is filled therewith;

removing the oxide layer on a central part of the large active region, whereas the oxide layer remains on an edge part of the large active region and on the small active region; and

planarizing the remaining oxide layer until the oxide layer within the shallow trench has substantially the same level as the silicon nitride layer.

5. (New) The method according to claim 4, wherein the oxide layer is formed by high density chemical vapor deposition.

6. (New) The method according to claim 4, wherein a partial reverse active mask is formed to etch the central part of the oxide layer on the active region.

7. (New) The method according to claim 4, wherein the oxide layer is planarized by chemical-mechanical polishing.

8. (New) A method of chemical-mechanical polishing for forming a shallow trench isolation, wherein a substrate having a plurality of active regions, including a large active region and a small active region, is provided, comprising:

forming a silicon nitride layer on the substrate;
forming a shallow trench between the active regions;
forming an oxide layer over the substrate, so that the shallow trench is filled therewith;

forming a partial reverse active mask on the oxide layer, whereas the oxide layer on an edge part of the large active region and on the small active region are covered by the partial reverse active mask;

etching the oxide layer with the silicon nitride layer as a stop layer, using the partial reverse active mask as a mask; and

planarizing the oxide layer until the oxide layer within the shallow trench has substantially the same level as the silicon nitride layer.

9. (New) The method according to claim 8, wherein the oxide layer is formed by high density chemical vapor deposition.

10. (New) The method according to claim 8, wherein the oxide layer is planarized by chemical-mechanical polishing.